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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,135	06/27/2003	Reinhard Lihl	LVIP106US	1134
24041 7590 03/22/2007 SIMPSON & SIMPSON, PLLC 5555 MAIN STREET WILLIAMSVILLE, NY 14221-5406			EXAMINER BLAKE, CAROLYN T	
			ART UNIT 3724	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			03/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/604,135

Applicant(s) 

LIHL ET AL.

Examiner

Carolyn T. Blake

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 5-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                        |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

### DETAILED ACTION

1. This action is in response to the amendment and remarks filed on December 28, 2006.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-4, 10, and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 1, 10, and 11, the limitation requiring "said incident illumination system directs light toward a curved water surface for reflection toward a specimen to estimate the thickness of at least one specimen section" constitutes new matter because it was not described or shown in the original disclosure. While the limitation was disclosed as prior art (paragraph 24), no reference is made as to if or how the thickness can be measured in the instant invention.

***Claim Rejections - 35 USC § 103***

5. Claims 1, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (hereinafter, AAPA) in view of Sitte et al (4,511,224), Wolf (DE 36 15 713), and Fukuoka (2003/0024368).

AAPA discloses a microtome (FIG 2, "Prior Art") substantially as claimed, including: a knife (7), a specimen arm (5) movable relative to the knife; at least one light source (23) acting as an incident illumination system (20); and wherein said incident illumination system directs light toward a curved water surface (22) for reflection toward a specimen to estimate the thickness of at least one specimen section.

AAPA fails to disclose three light sources and illumination systems. However, Sitte et al disclose a microtome comprising: a knife (5), a specimen arm (1) movable relative to the knife, at least one light source (18) acting as a base-mounted illumination system, at least one light source (17) acting as an incident illumination system, and at least one light source (12) acting as an internal preparation illumination system, and wherein all said illumination systems illuminate a region around the preparation. The three light sources and illumination systems of Sitte et al create an improved lighting arrangement that makes viewing of a specimen easier. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a base-mounted illumination system and an internal preparation illumination system, as taught by Sitte et al, on the AAPA microtome in order to more easily view a specimen.

Still, the modified AAPA microtome fails to teach the light source is a light-emitting diode. Wolf discloses a microtome (FIGS 1 and 2) having a specimen arm (18)

and an illumination system with a light source in which the light source is a light-emitting diode (89). Furthermore, Fukuoka discloses an illumination system for a cutting device in which multiple sources of light can be interchanged. Fukuoka states it is preferable to use LEDs because they generate relatively no heat in comparison to other light types (paragraph 55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide light-emitting diodes, as disclosed by Wolf, on the modified AAPA illumination systems in order to reduce heat generation, as disclosed by Fukuoka.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Sitte et al, Wolf, and Fukuoka as applied to claim 1 above, and further in view of Shankle et al (6,195,016 B1).

The modified AAPA device teaches the base-mounted illumination system encompasses at least one light-emitting diode, but fails to disclose a frosted glass disk mounted in front of the light-emitting diode. Shankle et al disclose the use of a frosted glass disk in combination with LEDs for the purpose of providing uniform white illumination light (col. 7, lines 1-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a frosted glass disk, as disclosed by Shankle et al, on the modified AAPA device for the purpose of providing uniform white illumination light.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Sitte et al, Wolf, Fukuoka, and Shankle et al as applied to claims 2 and 3 above, and further in view of Douglas-Hamilton et al (4,896,967).

Sitte et al disclose the base-mounted illuminations system (18) coincides with an optical axis of an observation microscope (6). Still, the modified AAPA device fails to teach the base-mounted illumination system has first and second light-emitting diodes that are inclined with respect to one another at an angle. Douglas-Hamilton et al disclose a base-mounted illumination system (FIG 8) with first and second light-emitting diodes (134) that are inclined with respect to one another at an angle (142). This configuration enhances the uniformity of illumination while preventing direct radiation from entering the observation microscope (col. 7, lines 19-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a first and second light-emitting diode that are inclined with respect to one another at an angle, as disclosed by Douglas-Hamilton et al, on the modified AAPA device for the purpose of providing uniform illumination while reducing direct radiation.

### ***Response to Arguments***

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Applicant notes the new limitations are described in paragraph 17 of the specification. However, the examiner can only find the new material in paragraph 24, wherein a prior art figure is referenced.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn T. Blake whose telephone number is (571) 272-4503. The examiner can normally be reached on Monday to Thursday, 7:00 AM to 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CB

CB

March 19, 2007



BOYER D. ASHLEY  
SUPERVISORY PATENT EXAMINER